Observations of Comet b 1887 (*Brooks*) *made at the Royal Observatory, Greenwich.*

(*Communicated by the Astronomer Royal.*)

The observations were made with the East or Sheepshanks Equatorial, aperture 6·7 inches, by taking transits over two cross wires at right angles to each other, and each inclined 45° to the parallel of Declination.

1887 *Comet b* (*Brooks*).

Greenwich Mean Solar Time.	Observer.	∥−✱ R.A.	Corr. for Par. and Refraction in R.A.	∥−✱ N.P.D.	Corr for Par. and Refraction in N.P.D.	No. of Comp.	Apparent R.A.	Apparent N.P.D.	Comp. Star.
1887 h m s		m s	s	′ ″	″		h m s	° ′ ″	
March 13 8 12 24	A. D.	−2 1·17	+0·30	+ 9 9·7	−1·7	3			*a*
13 8 30 1		−2 36·50	+0·30	− 0 31·6	−1·9	3	3 57 48·90	45 37 34·7	*b*
16 11 47 59	H. T.	−0 44·64	+0·30	+ 5 24·3	−3·9	5	4 4 4·53	48 15 50·6	*c*
18 8 17 5	H. T.	+0 22·12	+0·20	− 3 43·9	−2·1	6	4 7 33·75	49 44 29·1	*d*
23 8 0 51	H.	+1 20·66	+0·20	+ 4 35·8	−2·1	5	4 16 17·28	53 26 25·9	*e*
23 8 35 56		−1 48·70	+0·20	− 8 25·7	−2·4	3	4 16 20·71	53 27 15·9	*f*
24 9 58 27	T.	−0 23·31	+0 30	− 1 22·9	−3·0	8			*g*
24 10 11 34		+2 22·50	+0·30	− 2 7·8	−3·1	1			*h*
24 10 11 34		+2 1·50	+0·30	−10 2·8	−3·1	1	4 18 11·32	54 11 45·0	*i*
27 10 11 3	H. T.	−0 31·37	+0·30	− 1 40·9	−3·2	6			*j*

Mean Places of Comparison Stars.

	Star's Name.	R.A. 1887·0 h m s	N.P.D. 1887·0 ° ′ ″	Authority.
a	Arg. Zone +44° 859	3 59 47	45 29	Bonn Observations, Vol. V.
b	W. B. (2) III. 1241	4 0 25·52	45 38 8·5	Weisse's Bessel (2)
c	W. B. (2) IV. 8	4 4 49·29	48 10 29·0	Weisse's Bessel (2)
d	*f* Persei	4 7 11·88	49 48 13·5	Greenwich Observations, 1886
e	W. B. (2) IV. 259	4 14 56·92	53 21 49·2	Weisse's Bessel (2)
f	W. B. (2) IV. 337	4 18 9·69	53 35 41·3	Weisse's Bessel (2)
g	Arg. Zone +35° 858	4 15 44	54 13	Bonn Observations, Vol. IV.
h	W. B. (2) IV. 287	4 16 10·03	54 21 48·1	Weisse's Bessel (2)
i	Arg. Zone +35° 865	4 18 27	54 12	Bonn Observations, Vol. IV.
j	Arg. Zone +33° 871	4 23 23	56 14	Bonn Observations, Vol. IV.

The observations are corrected for parallax and refraction. The initials H. T., A. D., T., H. are those of Mr. Turner, Mr. Downing, Mr. Thackeray, and Mr. Hollis respectively.

Lunar Occultations on March 29, 1887. By C. Leeson Prince.

I observed the occultations of five stars this evening under very favourable conditions.

The grey light of the non-illuminated portion of the Moon was remarkably distinct at the limb, and its gradual approach to each star could not be watched with greater exactness.

	Local Sidereal Time. Disapp.	Reapp.
	h m s	h m s
θ^1 Tauri	9 46 17·5	10 42 6
θ^2 ,, ...	9 55 22	10 36 56
A small star	10 0 47·5	
A bright red star	10 31 23	
B.A.C. 1391	10 44 54·5	

About three or four seconds before occultation of the three principal stars I noticed a diffraction phenomenon which I do not recollect to have previously observed, viz. that as the Moon approached each star the brilliancy of the latter completely obliterated the grey tint of the lunar surface at the point of contact, and a dark semicircle appeared thereupon up to the moment of disappearance, which in the case of each star was quite instantaneous.

The reappearance of θ^1 and θ^2 *Tauri*, so far as I could judge, was not so immediate.

I employed my Equatorial telescope of 6·8 inches aperture and 12 feet focal length, mag. power 144.

The Observatory, Crowborough, Sussex:
April 2, 1887.

Errata.

In General Tennant's paper, "The Orbit of Comet II., 1883," page 26, line 11,

for $L = 114^\circ\ 39'\ 01''.9$

read $I = 114\ 59\ 01.9$

In General Tennant's paper, "Notes on Reflecting Telescopes," page 258, line 8,

for $Ap = \frac{a}{16} = 2a + \frac{a}{16}\left\{24v^2 + 9v^4 + \frac{7}{2}v^6 + \&c.\right\} \frac{1024 + 640v^2 + 96v^4 + 4v^6 + v^8}{32 - 4v^2 - 3v^4}$

read $Ap = \frac{a}{16} \cdot \frac{1024 + 640v^2 + 96v^4 + 4v^6 + v^8}{32 - 4v^2 - 3v^4} = 2a + \frac{a}{16}\left\{24v^2 + 9v^4 + \frac{7}{2}v^6 + \&c.\right\}$